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FROM: Terry W. Kramer
KRAMER & AMADO, P.C.

DATE: May 17, 2006

SUBJECT: U.S. Patent Application
Title: GRAPHIC IMAGE TEXTURE GENERATION
Serial No.: 09/118,572
Attorney Docket No.: PHB 34169A

PAGES: INCLUDING COVER PAGE (18)

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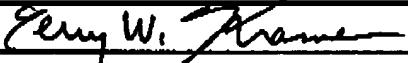
15

Application Number	09/118,572
Filing Date	July 17, 1998
First Named Inventor	Karl J. Wood
Art Unit	2628
Examiner Name	Ryan R. Yang
Attorney Docket Number	PHB 34169A

ENCLOSURES (Check all that apply)

<input checked="" type="checkbox"/> Fee Transmittal Form <input checked="" type="checkbox"/> Fee Attached <input type="checkbox"/> Amendment/Reply <input type="checkbox"/> After Final <input type="checkbox"/> Affidavits/declaration(s) <input type="checkbox"/> Extension of Time Request <input type="checkbox"/> Express Abandonment Request <input type="checkbox"/> Information Disclosure Statement <input type="checkbox"/> Certified Copy of Priority Document(s) <input type="checkbox"/> Reply to Missing Parts/ Incomplete Application <input type="checkbox"/> Reply to Missing Parts under 37 CFR 1.52 or 1.53	<input type="checkbox"/> Drawing(s) <input type="checkbox"/> Licensing-related Papers <input type="checkbox"/> Petition <input type="checkbox"/> Petition to Convert to a Provisional Application <input type="checkbox"/> Power of Attorney, Revocation <input type="checkbox"/> Change of Correspondence Address <input type="checkbox"/> Terminal Disclaimer <input type="checkbox"/> Request for Refund <input type="checkbox"/> CD, Number of CD(s) _____ <input type="checkbox"/> Landscape Table on CD	<input type="checkbox"/> After Allowance Communication to TC <input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences <input checked="" type="checkbox"/> Appeal Communication to TC (Appeal Notice, Brief, Reply Brief) <input type="checkbox"/> Proprietary Information <input type="checkbox"/> Status Letter <input type="checkbox"/> Other Enclosure(s) (please identify below):
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Firm Name	Kramer & Amado, P.C.		
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Printed name	Terry W. Kramer		
Date	May 17, 2006	Reg. No.	41,541

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This collection of information is required by 37 CFR 1.5. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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FEE TRANSMITTAL For FY 2006

 Applicant claims small entity status. See 37 CFR 1.27

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Complete If Known

Application Number	09/118,572
Filing Date	July 17, 1998
First Named Inventor	Karl J. Wood et al.
Examiner Name	Ryan R. Yang
Art Unit	2628
Attorney Docket No.	PHB 34169A

METHOD OF PAYMENT (check all that apply)

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1. BASIC FILING, SEARCH, AND EXAMINATION FEES

Application Type	FILING FEES		SEARCH FEES		EXAMINATION FEES	
	Fee (\$)	Small Entity Fee (\$)	Fee (\$)	Small Entity Fee (\$)	Fee (\$)	Small Entity Fee (\$)
Utility	300	150	500	250	200	100
Design	200	100	100	50	130	65
Plant	200	100	300	150	160	80
Reissue	300	150	500	250	600	300
Provisional	200	100	0	0	0	0

2. EXCESS CLAIM FEES

Fee Description

Each claim over 20 (including Reissues)

Small Entity

Fee (\$)

50 25

Each independent claim over 3 (including Reissues)

200 100

Multiple dependent claims

360 180

Total Claims	Extra Claims	Fee (\$)	Fee Paid (\$)	Multiple Dependent Claims	Fee (\$)	Fee Paid (\$)
- 20 or HP =	x	=				

HP = highest number of total claims paid for, if greater than 20.

Indep. Claims	Extra Claims	Fee (\$)	Fee Paid (\$)		
- 3 or HP =	x	=			

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3. APPLICATION SIZE FEE

If the specification and drawings exceed 100 sheets of paper (excluding electronically filed sequence or computer listings under 37 CFR 1.52(e)), the application size fee due is \$250 (\$125 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).

Total Sheets	Extra Sheets	Number of each additional 50 or fraction thereof	Fee (\$)	Fee Paid (\$)
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4. OTHER FEE(S)

Non-English Specification, \$130 fee (no small entity discount)

Fee Paid (\$)

Other (e.g., late filing surcharge): Appeal Brief

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SUBMITTED BY

Signature	<u>Terry W. Kramer</u>	Registration No. (Attorney/Agent)	41,541	Telephone	703-519-9801
Name (Print/Type)	Terry W. Kramer			Date	May 17, 2006

This collection of information is required by 37 CFR 1.136. The information is required to obtain or retain a benefit by the public which is to be (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 30 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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FEE TRANSMITTAL
For FY 2006 Applicant claims small entity status. See 37 CFR 1.27

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Complete if Known

Application Number

09/118,572

Filing Date

July 17, 1998

First Named Inventor

Karl J. Wood et al.

Examiner Name

Ryan R. Yang

Art Unit

2628

Attorney Docket No.

PHB 34169A

METHOD OF PAYMENT (check all that apply)

 Check Credit Card Money Order None Other (please identify): _____ Deposit Account Deposit Account Number: 50-0578 Deposit Account Name: _____

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Application Type	FILING FEES		SEARCH FEES		EXAMINATION FEES		Fees Paid (\$)
	Fee (\$)	Small Entity Fee (\$)	Fee (\$)	Small Entity Fee (\$)	Fee (\$)	Small Entity Fee (\$)	
Utility	300	150	500	250	200	100	_____
Design	200	100	100	50	130	65	_____
Plant	200	100	300	150	160	80	_____
Reissue	300	150	500	250	600	300	_____
Provisional	200	100	0	0	0	0	_____

2. EXCESS CLAIM FEES

Fee Description

Each claim over 20 (including Reissues) Fee (\$): 50 Fee (\$): 25Each independent claim over 3 (including Reissues) Fee (\$): 200 Fee (\$): 100Multiple dependent claims Fee (\$): 360 Fee (\$): 180

Total Claims	Extra Claims	Fee (\$)	Fee Paid (\$)	Multiple Dependent Claims	
				Fee (\$)	Fee (\$)
- 20 or HP =	x	=			

HP = highest number of total claims paid for, if greater than 20.

Indep. Claims Fee (\$): 200 Fee (\$): 100 Fee (\$): 360 Fee (\$): 180 Fee (\$): 50 Fee (\$): 25 Fee (\$): 200 Fee (\$): 100 Fee (\$): 360 Fee (\$): 180 Fee (\$): 50 Fee (\$): 25 Fee (\$): 200 Fee (\$): 100 Fee (\$): 360 Fee (\$): 180 Fee (\$): 50 Fee (\$): 25 Fee (\$): 200 Fee (\$): 100 Fee (\$): 360 Fee (\$): 180 Fee (\$): 50 Fee (\$): 25 Fee (\$): 200 Fee (\$): 100 Fee (\$): 360 Fee (\$): 180 Fee (\$): 50 Fee (\$): 25 Fee (\$): 200 Fee (\$): 100 Fee (\$): 360 Fee (\$): 180 Fee (\$): 50 Fee (\$): 25 Fee (\$): 200 Fee (\$): 100 Fee (\$): 360 Fee (\$): 180 Fee (\$): 50 Fee (\$): 25 Fee (\$): 200 Fee (\$): 100 Fee (\$): 360 Fee (\$): 180 Fee (\$): 50 Fee (\$): 25 Fee (\$): 200 Fee (\$): 100 Fee (\$): 360 Fee (\$): 180 Fee (\$): 50 Fee (\$): 25 Fee (\$): 200 Fee (\$): 100 Fee (\$): 360 Fee (\$): 180 Fee (\$): 50 Fee (\$): 25 Fee (\$): 200 Fee (\$): 100 Fee (\$): 360 Fee (\$): 180 Fee (\$): 50 Fee (\$): 25 Fee (\$): 200 Fee (\$): 100 Fee (\$): 360 Fee (\$): 180 Fee (\$): 50 Fee (\$): 25 Fee (\$): 200 Fee (\$): 100 Fee (\$): 360 Fee (\$): 180 Fee (\$): 50 Fee (\$): 25

3. APPLICATION SIZE FEE

If the specification and drawings exceed 100 sheets of paper (excluding electronically filed sequence or computer listings under 37 CFR 1.52(e)), the application size fee due is \$250 (\$125 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).

Total Sheets Fee (\$): 200 Fee (\$): 100 Fee (\$): 360 Fee (\$): 180 Fee (\$): 50 Fee (\$): 25 Fee (\$): 200 Fee (\$): 100 Fee (\$): 360 Fee (\$): 180 Fee (\$): 50 Fee (\$): 25 Fee (\$): 200 Fee (\$): 100 Fee (\$): 360 Fee (\$): 180 Fee (\$): 50 Fee (\$): 25 Fee (\$): 200 Fee (\$): 100 Fee (\$): 360 Fee (\$): 180 Fee (\$): 50 Fee (\$): 25 Fee (\$): 200 Fee (\$): 100 Fee (\$): 360 Fee (\$): 180 Fee (\$): 50 Fee (\$): 25 Fee (\$): 200 Fee (\$): 100 Fee (\$): 360 Fee (\$): 180 Fee (\$): 50 Fee (\$): 25 Fee (\$): 200 Fee (\$): 100 Fee (\$): 360 Fee (\$): 180 Fee (\$): 50 Fee (\$): 25 Fee (\$): 200 Fee (\$): 100 Fee (\$): 360 Fee (\$): 180 Fee (\$): 50 Fee (\$): 25 Fee (\$): 200 Fee (\$): 100 Fee (\$): 360 Fee (\$): 180 Fee (\$): 50 Fee (\$): 25 Fee (\$): 200 Fee (\$): 100 Fee (\$): 360 Fee (\$): 180 Fee (\$): 50 Fee (\$): 25

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Non-English Specification, Fee (\$): 130 fee (no small entity discount)Other (e.g., late filing surcharge): Fee (\$): 500.00 Fee (\$): 500.00

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PATENT

IN THE UNITED STATE PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

In re Application of : Karl J. Wood et al.
For : GRAPHIC IMAGE TEXTURE
Serial No.: GENERATION
Filed : 09/118,572
Art Unit : July 17, 1998
Examiner : 2628
Att. Docket : Ryan R. Yang
Confirmation No. : PHB 34169A
Confirmation No. : 9151

APPEAL BRIEF

Mail Stop Appeal Brief Patents
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450

Sir:

This Appeal Brief is submitted in support of the Notice of Appeal filed February 14, 2006.

I. REAL PARTY IN INTEREST

The party in interest is the assignee, U.S. Philips Corporation. The assignment document is recorded at Reel 009885 and Frame 0906.

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Application No: 09/118,572
Attorney's Docket No: PHB 34169A

II. RELATED APPEALS AND INTERFERENCES

Appeal No. 2003-0228. By its Decision on Appeal, mailed May 11, 2004, the Board of Patent Appeals and Interferences reversed a prior final rejection of claims 1-11.

III. STATUS OF CLAIMS

This is an appeal from the Final Office Action dated December 15, 2005 rejecting claims 1-5, 7 and 9. The December 15, 2005 Office Action objected to claims 6, 8, 10 and 11, but found them to be allowable if rewritten in independent form. No other claims are pending in the application. Thus, the claims being appealed are claims 1-11.

IV. STATUS OF AMENDMENTS

All amendments filed in this application have been entered. A correct copy of appealed claims 1-11, including all entered amendments thereto, appears in the attached Appendix.

V. SUMMARY OF CLAIMED SUBJECT MATTER

The present invention relates to an apparatus, and a computer graphics system including said apparatus, for graphic image texture generation.

The subject matter recited in claim 1, the only independent claim, is directed to an apparatus for texture mapping in a computer graphics system, using a predetermined set of standardized textures (page 3, lines 11-14 of the specification), the apparatus having an input to receive via a network (see

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Attorney's Docket No: PHB 34169A

Fig. 1; and page 6, lines 11-14) identifying data identifying one of the set of standardized textures. The identifying data comprises one or a sequence of program commands (page 3, lines 17-19). The execution of these program commands results in the generation of a respective procedural texture of the standardized set (page 3, lines 20-22).

VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

A. Claims 1-5, 7 and 9 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Rhoades et al. ("Real-Time Procedural Textures", June 1992, Proceedings of the 1992 Symposium in Interactive 3D Graphics, pages 95-100), hereinafter "Rhoades."

VII. ARGUMENT

In the Final Office Action dated 12/15/2005, the Examiner reiterated a rejection of claims 1-5, 7 and 9 under 35 U.S.C. § 102(b), using Rhoades as a reference, made in a non-final Office Action mailed June 24, 2005, subsequent to the May 11, 2004 Decision on the prior Appeal. Rhoades is a newly cited reference. Rhoades was not applied in any rejection of any claim considered in the prior Appeal.

The test for anticipation under section 102 is whether each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference. *Verdegaal Bros. v. Union Oil Co. of California*, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987); MPEP §2131. The identical invention must be shown in as complete detail as is contained in the claim. *Richardson v. Suzuki Motor*

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Attorney's Docket No: PHB 34169A

Co., 9 USPQ2d 1913, 1920 (Fed. Cir. 1989); MPEP §2131. The elements must also be arranged as required by the claim. *In re Bond*, 15 USPQ2d 1566 (Fed. Cir. 1990).

Rhoades does not disclose each and every element as set forth in independent claim 1, from which claims 2-5, 7 and 9 depend, either expressly or inherently, as described in greater detail below.

A. Rejection of Claims 1, 5-7 and 9 under 35 U.S.C. §102(b)

Claims 1-5, 7 and 9 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Rhoades et al. ("Real-Time Procedural Textures", June 1992, Proceedings of the 1992 Symposium in Interactive 3D Graphics, pages 95-100), hereinafter "Rhoades".

1. Claim 1

Rhoades does not teach each and every element recited in claim 1, either expressly or inherently.

In particular, Rhoades fails to teach "using a predetermined set of standardized textures" as recited in claim 1. Instead, Rhoades describes a software system running on a graphics engine that displays user-defined procedural textures for use in real-time graphics applications. Rhoades also describes a texture editor that allows a user to interactively create and edit procedural textures. See page 95, Abstract. Furthermore, Rhoades teaches away from the notion of a "predetermined set" by describing an interactive texture editor, that allows a user to create new textures, and dynamically displays a texture as the user changes its parameters. See page 98, col. 1.

Rhoades also fails to teach the apparatus having "an input to receive via a network identifying data identifying one of the set of standardized textures" as recited in claim 1. Instead, Rhoades describes a machine comprising multiple Graphics Processors, renderers, frame buffers and a workstation host,

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wherein all the parts of the machine communicate with each other over a "shared ring network." *See* page 96, col. 1 and Fig. 1. Each renderer disclosed in Rhoades is an array of bit-serial pixel processors operating in "Single Instruction Multiple Data" (SIMD) mode. The Graphics Processors interpret and execute instruction sets called "T-codes", and produce an Image Generation Controller (IGC) command instruction stream, which is routed to the appropriate renderers for SIMD execution. *See* page 96, col. 2, lines 12-23. The only network described by Rhoades is the "shared ring network" formed by the different elements of the machine.

Rhoades does not teach the machine being connected to a network through which identifying data, identifying one of the set of standardized textures, is received, as recited in claim 1. The "shared ring network" shown in Rhoades is not equivalent to a data network, such as the Internet/World Wide Web, through which identifying data is received from a remote service provider, as defined in the specification of the application. *See* page 6, lines 11-14.

Furthermore, Rhoades fails to teach "the identifying data comprises one or a sequence of program commands" as recited in claim 1. The "IGC command instruction stream" described by Rhoades does not anticipate the "sequence of program commands" recited in claim 1 for at least the following reasons. It is clearly stated by Rhoades that the IGC command instruction stream is routed to the renderers for SIMD execution, not to a processor operable to implement input program commands to generate procedural textures. *See* page 96, col. 2, lines 20-23. The renderers disclosed in Rhoades are not capable of processing input program commands to generate procedural textures. Rather the renderers disclosed in Rhoades only execute single instructions and apply those instructions to multiple data to

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Attorney's Docket No: PHB 34169A

send the result to a display device. Rhoades does not teach receiving the identifying data, i.e. the T-codes, via a network. The T-codes taught by Rhoades are actually directly written and/or modified by the programmer. Thus, Rhoades states that, "Adding a new T-code to our system is a straightforward task. Besides coding and testing of the T-code subroutine in C, the programmer needs only to update the T-code assembler parse table and the T-code subroutine dispatch table." Page 96, col. 2, lines 36-40.

For at least the foregoing reasons, claim 1 is patentable over Rhoades because Rhoades does not teach each and every element as set forth in claim 1.

2. Claims 2-11

Claims 2-11 depend from claim 1 and are therefore also patentable over Rhoades for at least the reasons stated above in connection with claim 1, as well as for the separately patentable subject matter recited therein. This assertion has been admitted by the Examiner with respect to claims 6, 8, 10 and 11.

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Attorney's Docket No: PHB 34169A

VIII. CONCLUSION

All the claims on appeal are patentable because they are not disclosed, taught or suggested by Rhoades. Accordingly, reversal of the rejection and allowance of claims 1-11 is respectfully solicited.

Respectfully submitted,
KRAMER & AMADO, P.C.

May 17, 2006

Date

Terry W. Kramer
Terry W. Kramer
Reg. No. 41,541

KRAMER & AMADO, P.C.
1725 Duke Street, Suite 240
Alexandria, VA 22314
Tel. (703) 519-9801
Fax. (703) 519-9802

Application No: 09/118,572
Attorney's Docket No: PHB 34169A

CLAIMS APPENDIX

1. Apparatus for texture mapping in a computer graphics system, using a predetermined set of standardized textures, the apparatus having an input to receive via a network identifying data identifying one of the set of standardized textures, and means for processing the data to generate output texels of the identified texture, wherein each texture of the standardized set is a procedural texture, the identifying data comprises one or a sequence of program commands, the execution of which will result in the generation of a respective procedural texture, with the means for processing data comprising a processor operable to implement all such input program commands or sequences of input program commands as required to generate the procedural textures of the standardized set.
2. Apparatus as claimed in claim 1, having at least one further input for one or more predetermined classes of numerical parameter, with the processor being arranged to generate procedural textures with reference to the or each numerical parameter value received.
3. Apparatus as claimed in claim 1, having at least one further input for a scale factor, with the processor being arranged to generate a procedural texture at a resolution determined by a received scale factor.

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Attorney's Docket No: PHB 34169A

4. Apparatus as claimed in claim 1, wherein the processor is operable to implement only such input program commands or sequences of input program commands as required to generate those procedural textures of the standardized set.
5. Apparatus as claimed in claim 1, further comprising a cache memory coupled with the processor, with the processor being configured to generate said procedural textures as texture maps within said cache.
6. Apparatus as claimed in claim 5, further comprising an input to receive a scale factor, and an interpolator to generate output texels from texture map entries in the cache at a resolution determined by the received scale factor.
7. A semiconductor chip comprising a texture mapping apparatus as claimed in claim 4 on a single substrate.
8. A semiconductor chip comprising a texture mapping apparatus as claimed in claim 6, with the processor, cache and interpolator on a common substrate.

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Attorney's Docket No: PHB 34169A

9. A computer graphics system including an apparatus as claimed in claim 1, together with a source of three-dimensional polygon data, a geometry processor coupled to receive said polygon data and arranged to generate a two-dimensional representation of said polygons, a source of program commands coupled to the input of the texture mapping apparatus and specifying textures to be applied to respective ones of said polygons, and rendering means coupled to receive the outputs of the geometry processor and texture mapping apparatus and arranged to generate an output image of said polygons with texture applied.
10. A computer graphics system as claimed in claim 9, wherein the sources of polygon data and program commands comprise an interface to a data network to which are coupled remote sources of such polygon data and program commands, the interface being coupled with a memory holding a store of network addresses for such remote sources and being operable to format and transmit messages to such addresses calling for the polygon data and program commands.
11. A computer graphics system as claimed in claim 10, wherein said program commands are transmitted over the network in virtual machine code and the system further comprises means for conversion of the program commands to a local machine code supported by the processor.

Application No: 09/118,572
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EVIDENCE APPENDIX

Listing and copies of evidence relied upon by the Examiner as to grounds of rejection to be reviewed on Appeal:

1. Rhoades et al., "Real-Time Procedural Textures," June 1992, Proceedings of the 1992 Symposium in Interactive 3D Graphics, pages 95-100.

Application No: 09/118,572
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RELATED PROCEEDINGS APPENDIX

1. Appeal No. 2003-0228 - Application 09/118,572
Decision on Appeal mailed May 11, 2004.
See attached copy.